Fibernet -- No. 509651

Category Subcategory Administering Agency Planning Area General Government Technology Services Technology Services Countywide Date Last Modified Required Adequate Public

Required Adequate Public Facility No Relocation Impact None. Status On-going

January 11, 2008

EXPENDITURE SCHEDULE (\$000)

Cost Element	Total	Thru FY07	Est. FY08	Total 6 Years	FY09	FY10	FY11	FY12	FY13	FY14	Beyond 6 Years
Planning, Design, and Supervision	2,645	818	427	1,400	400	375	250	175	100	100	0
Land	4	4	0	0	0	0	0	0	0	0	0
Site Improvements and Utilities	11,741	9,740	1,701	300	50	50	50	50	50	50	0
Construction	8,978	41	1,377	7,560	1,260	1,260	1,260	1,260	1,260	1,260	0
Other	19,883	19,583	0	300	50	50	50	50	50	50	0
Total	43,251	30,186	3,505	9,560	1,760	1,735	1,610	1,535	1,460	1,460	0

FUNDING SCHEDULE (\$000)

Contributions	73	73	0	0	0	0	0	0	0	0	0
G.O. Bonds	8,913	7,918	995	0	0	0	0	0	0	0	0
Cable TV	32,165	20,095	2,510	9,560	1,760	1,735	1,610	1,535	1,460	1,460	0
PAYGO	2,100	2,100	0	0	0	0	0	0	0	0	0
Total	43,251	30,186	3,505	9,560	1,760	1,735	1,610	1,535	1,460	1,460	0

DESCRIPTION

This project provides for the planning, design, and installation of a Countywide fiber optic cable-based communication network with the capacity to support voice, data, and video transmissions among Montgomery County Government (MCG), MCPS, Montgomery College (MC), M-NCPPC, HOC and WSSC facilities. FiberNet is also the communications backbone for the Public Safety Radio and Public Safety Mobile Data Systems (collectively, PSCS), and future technology implementations. Fibernet has an estimated useful life of at least 20 years. Upgrades and replacements to electronic components in the core and at user sites will be required periodically.

COST CHANGE

The increase is due to the inclusion of expenditures in FY13 and FY14 and increased contractor cost for laying fiber.

JUSTIFICATION

FiberNet is a critical infrastructure asset serving every agency, the fiber plant for ATMS, and the dedicated and redundant communications links for the PSCS/800 MHz system. As of September 1, 2007, 244 user sites are on-net and receiving critical services from FiberNet. In FY07, DTS completed the re-engineering of FiberNet (now referred to as FiberNet II) to directly support Ethernet connections. This provides a core network that is technologically newer, faster and less expensive on a per-site basis. The focus for FY09 and FY10 is transitioning many sites and services from the original FiberNet to FiberNet II, infrastructure improvements, and deployment of new sites. DTS, in cooperation with ITPCC and its ITAG workgroup, continues to refine the master implementation schedule. MCG, MCPS, MC, M-NCPPC, HOC and WSSC will require substantially increased communication services and bandwidth among their facilities. The County will provide fiber optic services to those facilities for which leased telecommunications services cannot meet current or projected demand as cost effectively as FiberNet. Studies include: Fibernet Master Plan; RAM Comm. Mar 1995; Fibernet Eval. Rpt., TRW, Sept 1997; Fibernet Proj. Cost Est., ARINC, Apr 1998; Fibernet Proj. Cost-Benefit Analysis, ARINC, Oct 1998; FiberNet Strategic Plan, PrimeNet, Jun 2002; FiberNet Strategic Direction, ITAG, Nov 2003; Fibernet service level agreement, Jan 2005.

OTHER

DTS is responsible for project management, network operations, and maintenance of electronics; DPWT for installation and maintenance of the fiber optic cable. Comcast, at DTS's direction, also provides fiber used in Fibernet. Sites installed to date include MCG departments/offices, PSCS sites, MC campuses, MCPS high schools/middle schools/administrative facilities, M-NCPPC sites, HOC sites. Sites have been, and will continue to be, installed in a priority order based on the expected cost savings/avoidance; current and future connectivity needs; and availability of fiber optic cable to an area.

FISCAL NOTE

Fibernet maintenance is supported by a grant from the franchise agreement with the County's cable service provider. The original grant amount of \$1.2 million/yr is increased by the CPI each year. For this reason the Operating Budget Impact is \$0.

APPROPRIATION AND EXPENDITURE DATA						
Date First Appropriation	FY96	(\$000)				
First Cost Estimate Current Scope	FY07	39,231				
Last FY's Cost Estimate		39,231				
Appropriation Request	FY09	1,760				
Appropriation Request Est.	FY10	1,735				
Supplemental Appropriation R	0					
Transfer		0				
Cumulative Appropriation		33,691				
Expenditures / Encumbrances		31,296				
Unencumbered Balance		2,395				
Partial Closeout Thru	FY06	0				
New Partial Closeout	FY07	0				
Total Partial Closeout		0				

COORDINATION

Department of Technology Services Department of Public Works and Transportation

Advanced Transportation Management System Project

Montgomery County Public Schools M-NCPPC

Montgomery College

HOC WSSC

Comcast

Public Safety Radio System

Information Technology Policy Coordination Committee (ITPCC)

ITPCC CIO Subcommittee

Interagency Technology Advisory Group (ITAG)

